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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/649,288	08/27/2003	Larry L. Gillanders	PC-802	5483
23717	7590	08/23/2006		EXAMINER
LAW OFFICES OF BRIAN S STEINBERGER 101 BREVARD AVENUE COCOA, FL 32922				FLETCHER III, WILLIAM P
			ART UNIT	PAPER NUMBER
			1762	

DATE MAILED: 08/23/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	10/649,288	GILLANDERS ET AL.
	Examiner	Art Unit
	William P. Fletcher III	1762

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 28 June 2006.
 2a) This action is **FINAL**. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 10-18 and 43-61 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) Claim(s) _____ is/are allowed.
 6) Claim(s) 10-18 and 43-61 is/are rejected.
 7) Claim(s) _____ is/are objected to.
 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on 27 August 2003 is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
	6) <input type="checkbox"/> Other: _____

DETAILED ACTION

Response to Amendment

1. Applicant's amendment and remarks filed June 28, 2006 is noted.
2. Claims 10-18 and 43-61 are now pending.

Response to Arguments

3. Applicant's arguments, see the remarks, filed June 28, 2006, with respect to the objection and rejections under 35 USC 112, set forth in the prior Office action, have been fully considered in light of applicant's amendment and are persuasive. The objection and rejections are withdrawn.
4. Applicant's arguments, see the remarks, filed June 28, 2006, with respect to the rejections of the claims based on Kruse, have been fully considered and are persuasive. Applicant has amended the claims so that they find support in applicant's provisional application, thereby antedating the Kruse reference. Therefore, these rejections have been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Kamiya (JP 06-126246 A).

Claim Rejections - 35 USC § 103

5. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
6. Claims 10-18 and 43-61 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kamiya (JP 06-126246 A) in view of Reimelt (US 5,924,913 A).

A. Kamiya teaches a process for the *in situ* cleaning and coating of pipes of an existing multi-story piping system in a building [abstract; claims; and 0002-0006]. The process comprises: isolating the piping system [Fig. 1 and 0015]; cleaning the piping system

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[0010]; applying an epoxy barrier coating material to the interior walls of the piping system while the piping system remains *in situ* in the building [Fig. 1 and 0014-0020]; and restoring the piping system to service.

B. This reference does not explicitly state: (i) that cleaning involves the introduction of a non-liquid cleaning agent that includes an abrasive medium into generated air into the pipes; (ii) that the epoxy material is mixed; and (iii) that the pipes are restored to service within approximately 24-96 hours.

i. Reimelt teaches a process for the cleaning of pipes in a piping system in which abrasive resin particles (sand) in air are utilized to clean the pipes. The particles are reciprocated by alternating vacuum and overpressure of the air in which the particles are entrained [1:65-5:15]. It would have been obvious to one of ordinary skill in the art to modify the process of Kamiya so as to utilize the cleaning process of Reimelt because: (1) Kamiya teaches the use of a “conventional means” of cleaning [0010]; and (2) Reimelt’s process effectively removes and entrains the particulate material such that it moves toward an outlet end of the piping system for removal, as well as advantageously facilitating leak detection [2:60-3:7]. With specific respect to new claims 46 and 58, Reimelt additionally teaches collecting the debris [3:22-27].

ii. Kamiya does not explicitly limit the process by teaching any particular epoxy coating material formulation. Consequently, any suitable epoxy coating material would have been obvious. It is the examiner’s position that two-component (two-part, two-pack, etc.) epoxy coating compositions are known in the art of pipe coating. The resin and hardener components are kept separate for storage and mixed immediately prior to coating. Consequently, it would have been obvious to one of ordinary skill in the art to modify the

process of Kamiya so as to utilize such an epoxy coating composition; mixing the components of the composition prior to application.

iii. Finally, because Kamiya does not explicitly teach a waiting period after completion of the coating process, it is the examiner's position that the piping system is immediately ready to be returned to service, absent evidence to the contrary.

C. With specific respect to claims 11 and 51, Kamiya teaches coating pipes of diameter 50 mm (~2 in) and 40 mm (~1.6 mm) [0015].

D. With specific respect to claims 12 and 50, none of the cited references teach a particular coating thickness, but it is the examiner's position that the thickness of the barrier coating is a result-effective variable. The barrier coating must be thick enough to protect the piping system but not so thick as to be prohibitively expensive or unduly restrict flow through the piping system. Absent clear and convincing evidence of unexpected results establishing the criticality of the claimed thickness, it would have been obvious to one of ordinary skill in the art to modify the process of Kruse so as to optimize the barrier coating thickness (MPEP § 2144.05).

E. With specific respect to claims 13-18, while Kamiya teaches specifically water-carrying pipes, it is the examiner's position that it would have been obvious to one of ordinary skill in the art to apply Kamiya's process to any known piping arrangement similar to that of Kamiya's because doing would require the same steps and produce the same outcome.

Conclusion

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7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

8. The prompt development of clear issues in the prosecution history requires that applicant's reply to this Office action be fully responsive (MPEP § 714.02). When filing an amendment, applicant should specifically point out the support for any amendment made to the disclosure, including new or amended claims (MPEP §§ 714.02 & 2163). A fully responsive reply to this Office action, if it includes new or amended claims, must therefore include an explicit citation (i.e., page number and line number) of that/those portion(s) of the original disclosure which applicant contends support(s) the new or amended limitation(s).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to William P. Fletcher III whose telephone number is (571) 272-1419. The examiner can normally be reached on Monday through Friday, 0900h-1700h.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy H. Meeks can be reached on (571) 272-1423. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



08/17/2006

William Phillip Fletcher III
Patent Examiner (FSA), USPTO
Art Unit 1762

Fredericksburg, VA
August 17, 2006